



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/536,995	05/31/2005	David Rees Mugeli	6002-1083	9943
<div>465 7590 03/18/2008</div> <div>YOUNG & THOMPSON 209 Madison Street Suite 500 ALEXANDRIA, VA 22314</div>				
EXAMINER				
TALBOT, MICHAEL				
ART UNIT		PAPER NUMBER		
3722				
MAIL DATE		DELIVERY MODE		
03/18/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/536,995

Applicant(s)

MUGELI, DAVID REES

Examiner

MICHAEL W. TALBOT

Art Unit

3722

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 December 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 May 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)
- Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 and 6-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over DD 203260 in view of Robinette (US 2,101,347). DD 203260 shows in the Figure a rotary bit with a shank (1,2,4,5) adapted to locate in a chuck comprising an insert end (4,5) and an end section (1,2) extending from the insert end having at least one elongate flat (at 1) which locates inside the chuck when the shank is operatively engaged in the chuck, and a wasted safety section (3) spaced from the insert end sufficiently so that when the shank is operatively engaged in the chuck, the wasted safety section is outside the chuck and the wasted safety section having a predetermined shear torque rating so that the shank shears at the wasted safety section if the predetermined shear torque is exceeded (Abstract). DD 203260 shows the shank including a further flat outboard (at 4) of the wasted safety section so that after the wasted safety section has been sheared, if necessary, a user may still use the bit on a temporary basis to complete a drilling task (Abstract). DD 203260 lacks the shear torque rating being a selected one of a range of ratings according to a classification of risk related to the intended use of the bit.

Robinette '347 shows a rotary bit (10) having a wasted safety section (A,B,C,D) with a shear torque rating being a selected one of a range of ratings according to a classification of risk related to the intended use of the rotary bit (page 1, col. 1, lines 3-7). In view of this teaching of Robinette '347, it would have been obvious to one of ordinary skill in the art to modify the rotary bit of DE 29700943 to include a selected shear torque rating as taught Robinette '347 to provide

the user with important safety information as to the tool operational capabilities and to generate the desired localized fracture to the rotary tool shaft, thus preserving the rotary tool for further use, if needed.

3. Claims 2-4,14-16,19,20,24-26 and 29-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over DD 203260 in view of Robinette (US 2,101,347). DD 203260 in view of Robinette '347 does not disclose expressly the shear torque ratings of 15-30 ft-lbs, 15-20 ft-lbs, 25-30 ft-lbs, and 5-40 ft-lbs. Instead, DD 203260 in view of Robinette '347 is silent to the specific values of the shear torque rating. At the time of the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to select "a shear torque rating of 15-30 ft-lbs, 15-20 ft-lbs, 25-30 ft-lbs, or 5-40 ft-lbs" because Applicant has not disclosed that the "shear torque ratings of 15-30 ft-lbs, 15-20 ft-lbs, 25-30 ft-lbs, and 5-40 ft-lbs" provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected the rotary tool of DD 203260 in view of Robinette '347, and Applicant's rotary tool to perform equally well with either the "undisclosed shear torque rating" as taught by DD 203260 in view of Robinette '347 or the claimed "shear torque ratings of 15-30 ft-lbs, 15-20 ft-lbs, 25-30 ft-lbs, and 5-40 ft-lbs" because both levels of shear torque ratings would generate the desired result of localized fracture to the rotary tool shaft, thus preserving the rotary tool for further use, if needed.

Furthermore, Applicant does not provide any criticality or unexpected results for the "shear torque ratings of 15-30 ft-lbs, 15-20 ft-lbs, 25-30 ft-lbs, and 5-40 ft-lbs" as recited in claims 2-4,14-16,19-21,24-26 and 30-33.

4. Claims 12,13,17,18,22,23,27,28,32 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over DD 203260 in view of Robinette (US 2,101,347), further in view of Wanner (US 5,028,057). DD 203260 in view of Robinette '347 lacks the rotary bit having a code thereon

to provide information to the user about the rotary bit (i.e. type, size, material composition, mechanical properties or intended drilling activity).

Wanner '057 shows a rotary bit (48,58) having a code (50,60) thereon to provide information to the user about the rotary bit (col. 4, line 66 through col. 5, line 31). In view of this teaching of Wanner '057, it would have been obvious to one of ordinary skill in the art to modify the rotary bit of DD 203260 in view of Robinette '347 to include coded information on the tool shaft as taught Wanner '057 to provide the user with important safety information as to the tool operational capabilities through the use of indicia.

5. Claims 1 and 6-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over DE 29700943 in view of Robinette (US 2,101,347). DE 29700943 shows in Figs 1-3 a rotary bit (5) with a shank (7) adapted to locate in a chuck comprising an insert end (10) and an end section (13) extending from the insert end having at least one elongate flat (8) which locates inside the chuck when the shank is operatively engaged in the chuck, and a wasted safety section (15) spaced from the insert end sufficiently so that when the shank is operatively engaged in the chuck, the wasted safety section is outside the chuck and the wasted safety section having a predetermined shear torque rating so that the shank shears at the wasted safety section if the predetermined shear torque is exceeded (Abstract). DE 29700943 shows the shank including a further flat outboard (12) of the wasted safety section so that after the wasted safety section has been sheared, if necessary, a user may still use the bit on a temporary basis to complete a drilling task (Abstract). DE 29700943 lacks the shear torque rating being a selected one of a range of ratings according to a classification of risk related to the intended use of the bit.

Robinette '347 shows a rotary bit (10) having a wasted safety section (A,B,C,D) with a shear torque rating being a selected one of a range of ratings according to a classification of risk related to the intended use of the rotary bit (page 1, col. 1, lines 3-7). In view of this teaching of

Art Unit: 3722

Robinette '347, it would have been obvious to one of ordinary skill in the art to modify the rotary bit of DE 29700943 to include a selected shear torque rating as taught Robinette '347 to provide the user with important safety information as to the tool operational capabilities and to generate the desired localized fracture to the rotary tool shaft, thus preserving the rotary tool for further use, if needed.

6. Claims 2-4, 14-16, 19, 20, 24-26 and 29-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over DE 29700943 in view of Robinette (US 2,101,347). DE 29700943 in view of Robinette '347 does not disclose expressly the shear torque ratings of 15-30 ft-lbs, 15-20 ft-lbs, 25-30 ft-lbs, and 5-40 ft-lbs. Instead, DE 29700943 in view of Robinette '347 is silent to the specific values of the shear torque rating. At the time of the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to select "a shear torque rating of 15-30 ft-lbs, 15-20 ft-lbs, 25-30 ft-lbs, or 5-40 ft-lbs" because Applicant has not disclosed that the "shear torque ratings of 15-30 ft-lbs, 15-20 ft-lbs, 25-30 ft-lbs, and 5-40 ft-lbs" provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected the rotary tool of DE 29700943 in view of Robinette '347, and Applicant's rotary tool to perform equally well with either the "undisclosed shear torque rating" as taught by DE 29700943 in view of Robinette '347, or the claimed "shear torque ratings of 15-30 ft-lbs, 15-20 ft-lbs, 25-30 ft-lbs, and 5-40 ft-lbs" because both levels of shear torque ratings would generate the desired result of localized fracture to the rotary tool shaft, thus preserving the rotary tool for further use, if needed.

Furthermore, Applicant does not provide any criticality or unexpected results for the "shear torque ratings of 15-30 ft-lbs, 15-20 ft-lbs, 25-30 ft-lbs, and 5-40 ft-lbs" as recited in claims 2-4, 14-16, 19-21, 24-26 and 30-33.

Art Unit: 3722

7. Claims 12,13,17,18,22,23,27,28,32 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over DE 29700943 in view of Robinette (US 2,101,347), further in view of Wanner (US 5,028,057). DE 29700943 in view of Robinette '347 lacks the rotary bit having a code thereon to provide information to the user about the rotary bit (i.e. type, size, material composition, mechanical properties or intended drilling activity).

Wanner '057 shows a rotary bit (48,58) having a code (50,60) thereon to provide information to the user about the rotary bit (col. 4, line 66 through col. 5, line 31). In view of this teaching of Wanner '057, it would have been obvious to one of ordinary skill in the art to modify the rotary bit of DE 29700943 in view of Robinette '347 to include coded information on the tool shaft as taught Wanner '057 to provide the user with important safety information as to the tool operational capabilities through the use of indicia.

Response to Arguments

8. Applicant's arguments filed 26 December 2006 have been fully considered but they are not persuasive.

9. Examiner respectfully disagrees with Applicant's arguments that the above combinations do not teach "a predetermined shear torque rating being a selected one of a range of ratings according to a classification of risk related to the intended use of the bit". With the application of cited prior art reference Robinette (US 2,101,347), the above combinations do clearly teach "a predetermined shear torque rating" through the use of multiple fracture locations (A,B,C,D) displaying increasing strengths that can be classified according to a risk related to the intended use of the rotary bit .

Furthermore, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably

distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

12. Any inquiry concerning the content of this communication from the examiner should be directed to Michael W. Talbot, whose telephone number is 571-272-4481. The examiner's office hours are typically 8:30am until 5:00pm, Monday through Friday. The examiner's supervisor, Mrs. Monica S. Carter, may be reached at 571-272-4475.

In order to reduce pendency and avoid potential delays, group 3720 is encouraging FAXing of responses to Office Actions directly into the Group at FAX number 571-273-8300. This practice may be used for filling papers not requiring a fee. It may also be used for filing

Art Unit: 3722

papers, which require a fee, by applicants who authorize charges to a USPTO deposit account. Please identify Examiner Michael W. Talbot of Art Unit 3722 at the top of your cover sheet.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. W. T./
Examiner, Art Unit 3722
8 March 2008

/Monica S. Carter/
Supervisory Patent Examiner, Art Unit 3722